M60050.002196
MCAS EL TORO
SSIC # 5090.3

Chron No.: CTO-0142/0372

MEETING MINUTES

Meeting Subject: Site 24 Pilot Test Update	**Meeting Date:** April 15, 1998 **Meeting Time:** 10:00 AM **Meeting Place:** Conference Call **Meeting Notes Prepared By:** Patrick Brooks

Attendees: (*Part Time)

Navy	Bechtel	Other
Bernie Lindsey, RPM	Pat Brooks, CTOL	Glenn Kistner, U.S. EPA
	Dan Eldredge	Herb Levine, U.S. EPA
		Tayseer Mahmoud, DTSC
		Patricia Hannon, RWQCB
		Bill Sedlak, OHM

Additional Distribution:
Please See the Transmittal Sheet

Pat Brooks reviewed the field work that had been accomplished since the last Site 24 Update meeting. Extraction and injection are ongoing at both 24EX3 and 24EX5. Time-drawdown curves for wells 24EX3, 24IN1, 24EX5, and 24IN2OB1 were included with the agenda and faxed to the technical team.

The buildup curve from 24IN1 shows a gradual increase in buildup from about 30,000 minutes to 80,000 minutes. Background water levels were checked and while they increase, background water levels alone do not account for the increase in the injection well buildup that is observed. The injection rate was fairly constant, so that does not account for the increase in buildup either. It is assumed that the well is experiencing a loss in efficiency due to partial plugging of the well screen or formation. Pat suggested that a video be performed of the well screen during the shutdown period from May 15 to June 15. The well could be redeveloped if needed, and retested to see if we can regain the well's efficiency after development.

Drawdown in 24EX3 remains constant. The TCE concentrations from the extracted groundwater are approximately 300 µg/L.

The buildup in injection well 24IN2OB1 is about 21 feet with an injection rate of 40 gallons per minute (gpm). The vacuum-enhanced test at 24EX5 is being run with about 50 inches of applied vacuum as shown on the attached graph. This vacuum pressure was selected to maximize air flow.

CPT/HydroPunch work has been completed. Samples were collected at Location 13 from 131 and 161 feet. Deeper samples could not be collected due to CPT rig refusal. Several attempts were made. The rig then moved to Location 11 to attempt a deep sample collection for a second time. These attempts also met with refusal. A revised table of results was included with the agenda. Pat promised to send out a map of TCE concentrations in the shallow groundwater unit and several geologic cross sections so a decision could be made whether additional sampling was necessary. Preliminary review of the data indicate that TCE-contaminated groundwater is migrating into deeper stratigraphic units as it moves off-Station.

The step-drawdown test for 24EX6 is planned for May 4 and May 5. Based on observations during well development, Pat suggested that initial pumping rates for the step-drawdown test be 5, 10, and 15 gpm.

These pumping rates could be modified based on field observations during pumping. The EPA, DTSC, and RWQCB concurred.

Pat said that after reviewing aquifer test results for EX3, EX4, and EX5, it was apparent that data from 10,000 minutes to 20,000 minutes was not as important as the first 10,000 minutes. Pat said he would provide the team with the Cooper-Jacob and Neuman analyses for review. Pat suggested that the aquifer tests at 24 EX1 may be shortened to one week for the constant-rate test and one week for the vacuum-enhanced test. A decision could be made next week. Herb Levine of the EPA said that it sounded like a good idea to him.

The drilling crew mobilized the dual-tube percussion rig to the site and are proceeding with the destruction of well 24EX1OB

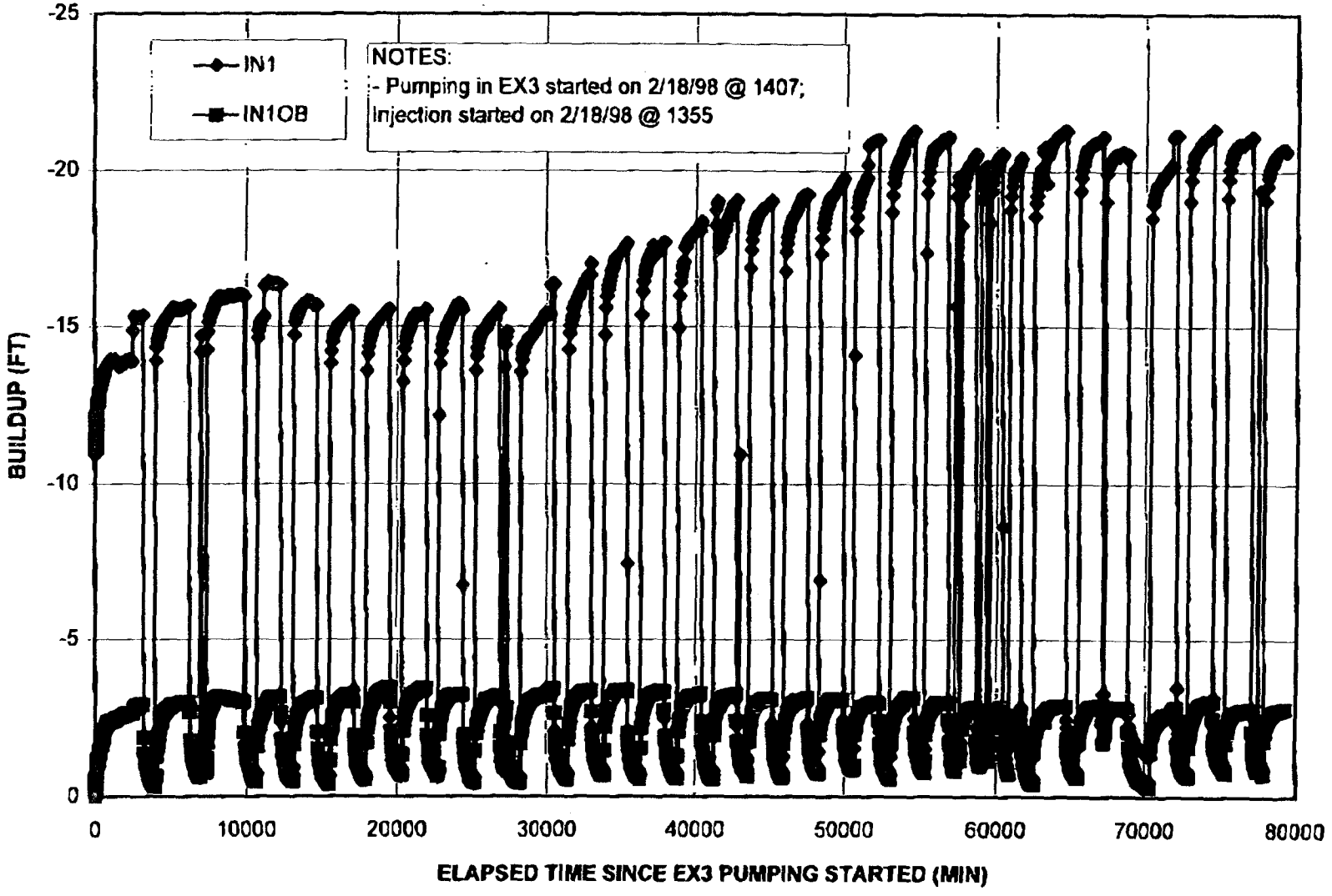
The Plan of Action for Site 24 field work for the next two weeks included the following:

1. Present results from cPT/HydroPunch sampling at the leading edge of the TCE hot spot.
2. complete vacuum-enhanced test at 24EX5 and 24IN2OB1 (4/21/98).
3. continue extraction at 24EX3 and injection at 24IN1.
4. complete destruction of observation well 24EX1OB.
5. Prepare for step-drawdown test at 24EX6.

Plan of Action - April 15 to April 29, 1998
Groundwater Remediation Pilot Testing - Site 24
MCAS El Toro

1. **Present results from CPT/HydroPunch sampling at the leading edge of the TCE hot spot.**
2. **Complete vacuum-enhanced test at 24EX5 and 24IN2OB1 (4/20/98).**
3. **Continue extraction at 24EX3 and injection at 24IN1.**
4. **Complete destruction of well 24EX1OB.**
5. **Prepare for step-drawdown tests at 24EX6 and 24EX1.**

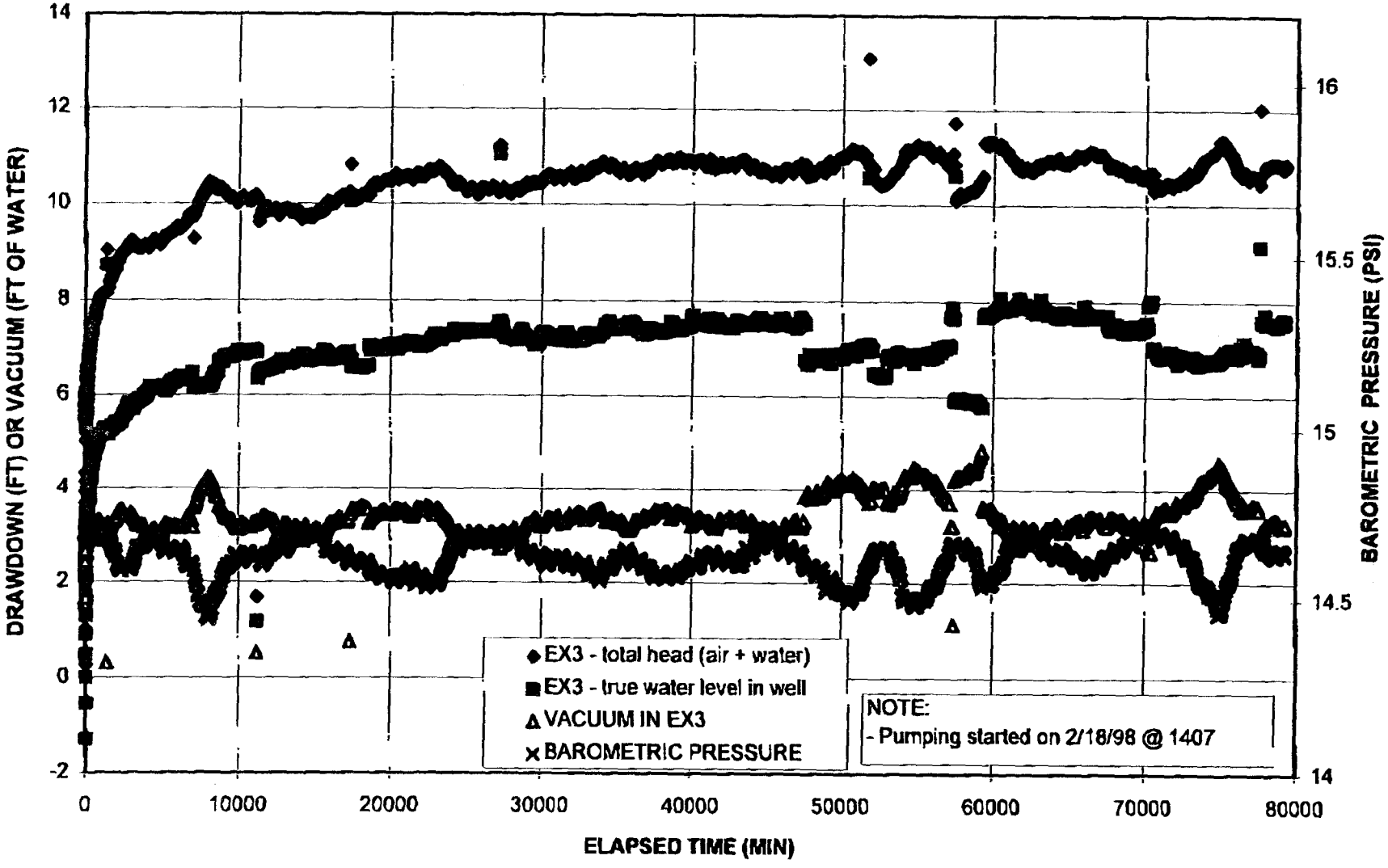
IN1 DURING EX3 VACUUM-ENHANCED AQUIFER TEST (SVE#3)



FILE: EX3SVE3.XLS

4/14/98 4:21 PM

EX3 VACUUM-ENHANCED AQUIFER TEST (SVE#3)
PUMPING WELL



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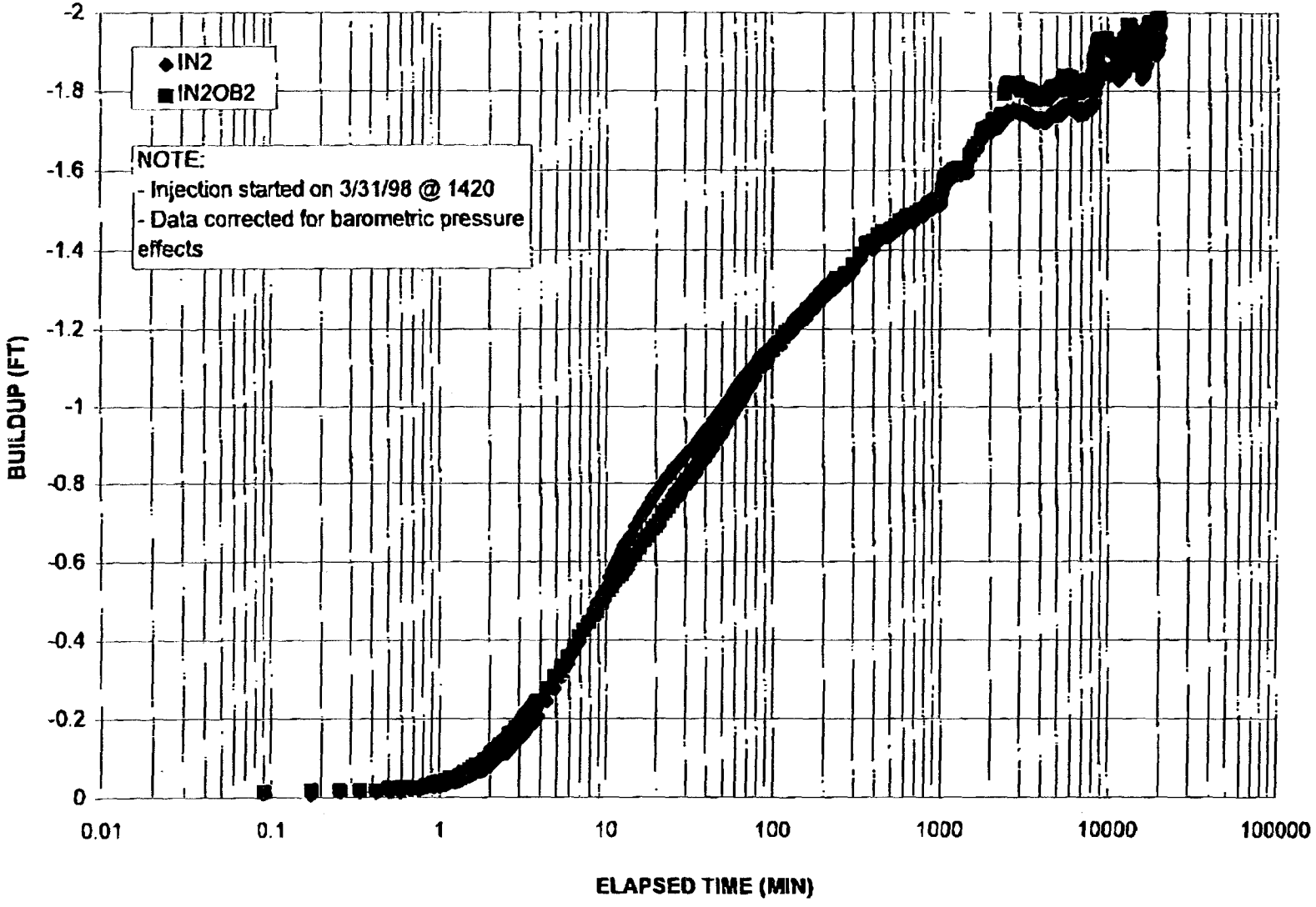
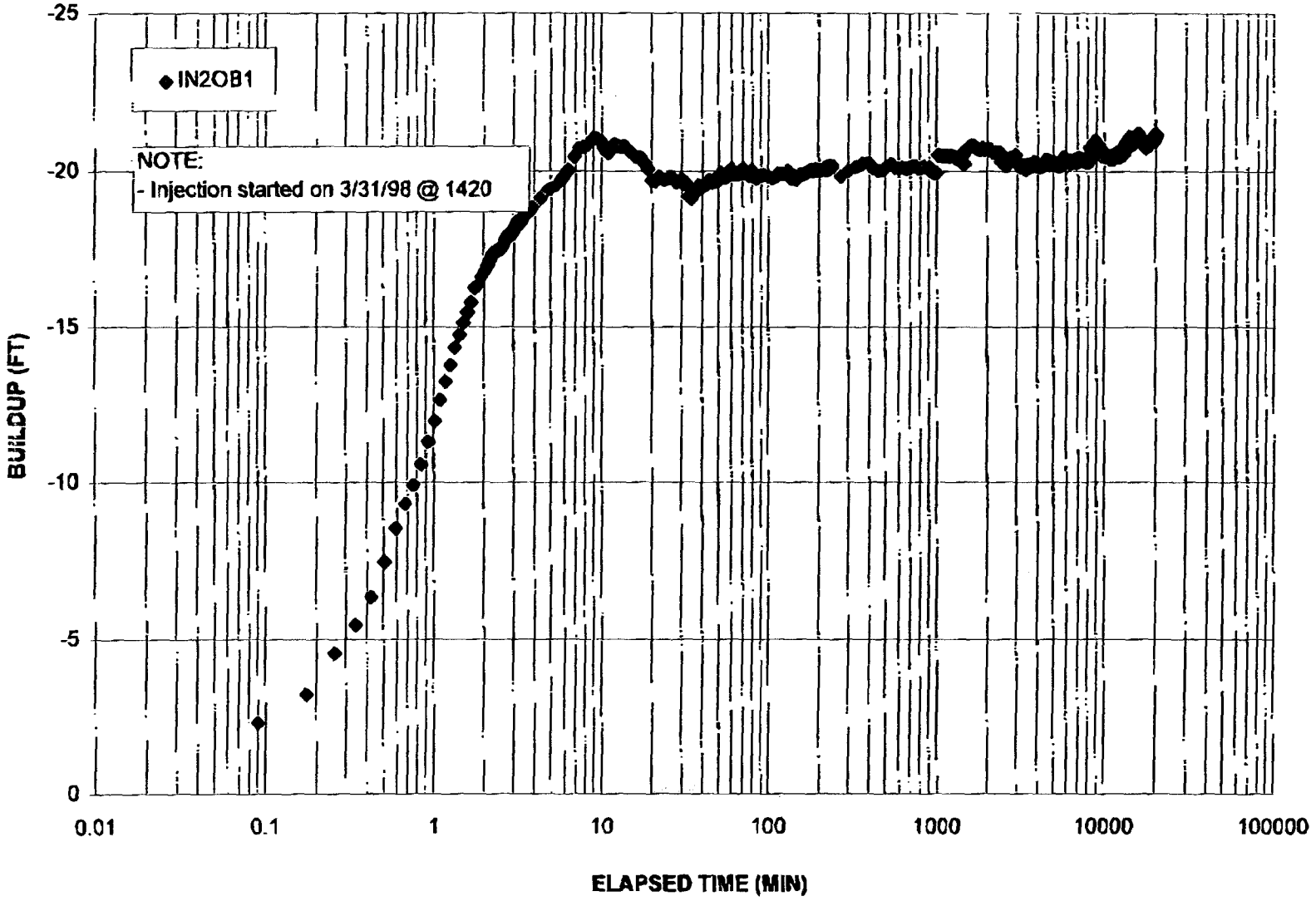
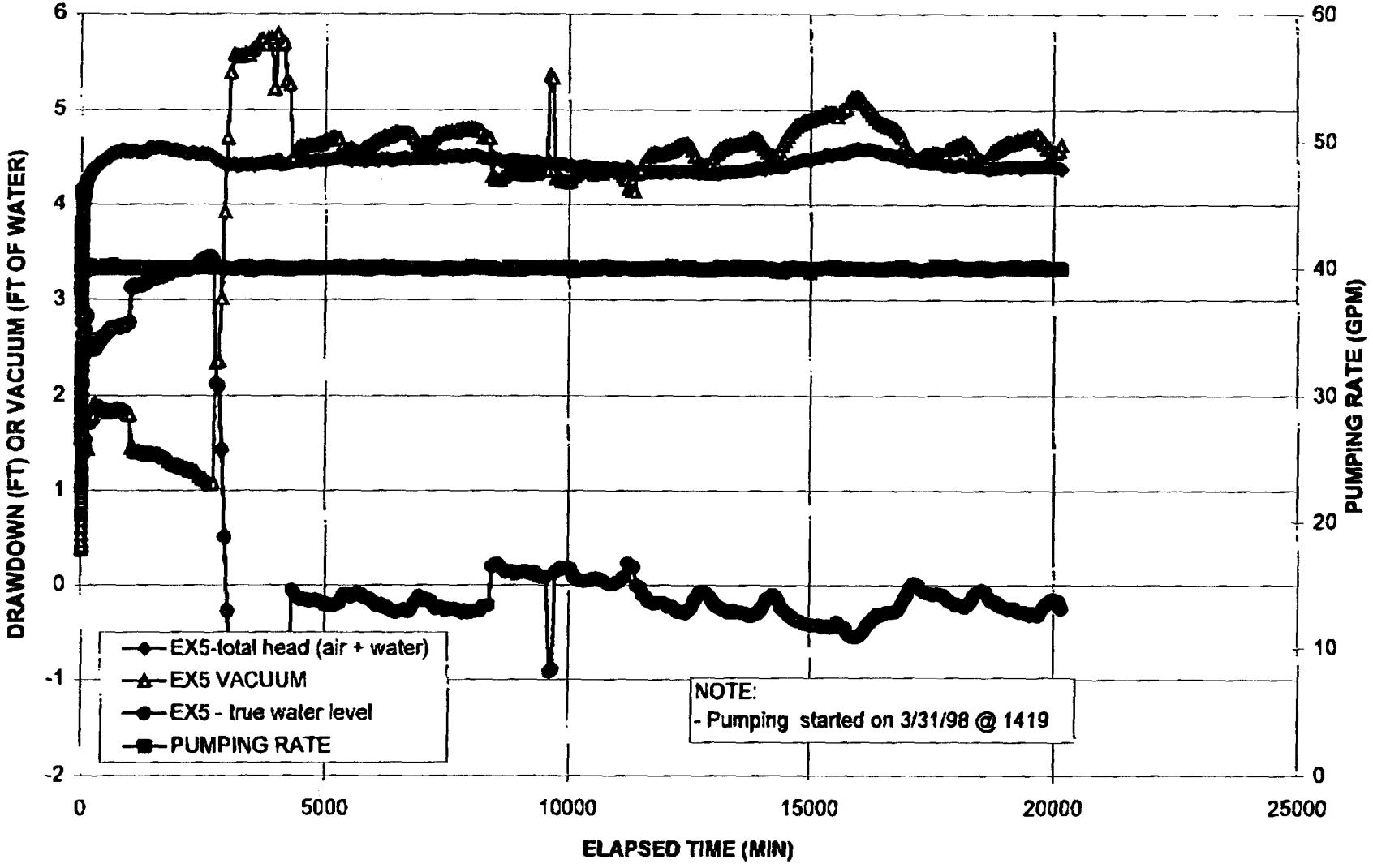
IN2OB1 CONSTANT RATE AQUIFER BUILDUP TEST
OBSERVATION WELLS



IN2OB1 CONSTANT RATE AQUIFER BUILDUP TEST



EX5 SVE-ENHANCED CONSTANT RATE TEST



TCE CONCENTRATION IN HYDROPUNCH SAMPLES
LEADING EDGE OF TCE HOT SPOT
SITE 24 - MCAS EL TORO

Location No.	Date	Depth (feet)	TCE Concentration (µg/L)
1	1/20/98	130	400
	1/20/98	158	420
	1/23/98	189	21.4
	1/23/98	210	5.99
2	1/29/98	137	ND
	1/29/98	149	12.7
	1/29/98	177	107
	3/6/98	211	2.8
3	1/26/98	123	4.88
	1/26/98	141	6.22
	1/26/98	157	29.8
	1/27/98	181	1.19
4	2/2/98	124	2.33
	2/3/98	140	10.5
	2/4/98	159	61
	2/19/98	173	14
	2/20/98	200	1.7
5	2/26/98	132	80
	2/26/98	145	660
	2/27/98	162	480
	2/27/98	180	560
6	2/23/98	127	0.09J
	2/23/98	146	0.3J
	2/24/98	163	0.9
	2/24/98	171	2
	2/25/98	180	9.5
7	3/5/98	136.5	43E
	3/4/98	152	8.2
	3/5/98	180.5	6.1, 2.8
	3/6/98	200	refusal
8	2/13/98	130	46
	2/13/98	155	13
	2/17/98	166	150E, 170E
	2/19/98	181	220E

Location No.	Date	Depth (feet)	TCE Concentration (µg/L)
9	4/1/98	140	13
	4/1/98	155	170E
	4/1/98	176	290E
10	4/3/98	140	
	4/6/98	165	62 E
	4/6/98	180	27
	4/6/98	193	110E
11	3/19/98	130	5.2
	3/20/98	145	4.3
		172	Refusal
12	3/25/98	130	4.2
	3/25/98	145	24
	3/26/98	167	14
13	4/7/98	131	3.2
	4/8/98	161	8.5

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CTO #: 142
LOCATION: MCAS El Toro

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